10/563123

IAP20 R33 1. 1. 1. 1710 03 JAN 2006

Attorney's Docket No. OMY-0051

AMENDMENT

(Amended Claims under Article 19)

Replacement Sheets for Claims

International Application No.: PCT/JP2004/006752

Applicant(s): Yoichiro TERASAWA

Title: INFORMATION PROCESSING APPARATUS, SOFTWARE UPDATING SYSTEM, METHOD OF UPDATING SOFTWARE AND PROGRAM THEREOF

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Malace. JAN 2006

Claims amended according to PCT Article 19

What is claimed is:

1. (Amended) An information processing apparatus capable of communicating with a center computer through a network, comprising:

sending means for sending a user identification information for identifying a user using the information processing apparatus to the center computer;

first obtaining means for obtaining from the center computer a plurality of location informations indicating locations of a plurality of storing regions that correspond to the user identification information sent by the sending means, out of a plurality of location informations of the plurality of storing regions that are made to correspond to the user identification information of each of a plurality of users: the plurality of storing regions are provided on the network for storing update softwares for a plurality of softwares provided by a plurality of software vendors to the plurality of users;

second obtaining means for obtaining a plurality of lists of the plurality of update softwares by accessing to the plurality of storing regions storing the plurality of update softwares according to the plurality of location informations obtained by the first obtaining means;

judging means for judging whether there is any update softwares to be obtained by comparing the obtained list and the softwares currently being installed in the information

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processing apparatus; and

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third obtaining means, when the judging means judges that there are some update softwares to be obtained, for obtaining the update softwares by accessing to each of the storing regions storing the update softwares for each of the software judged to be updated according to each of the obtained location informations.

 The information processing apparatus as set forth in claim 1,

wherein the update softwares are modules for updating softwares currently being installed in a plurality of the information processing apparatuses of the plurality of users that are made to correspond to the plurality of storing regions storing the update softwares; and

wherein the judging means has:

means for comparing the list of modules obtained from the storing regions storing the update softwares and the modules that are currently being installed in the information processing apparatus and forming a list of newer versions of the modules than the modules currently being installed in the information processing apparatus out of the list of modules obtained from the storing regions storing the update softwares; and

means for presenting the formed list to the user and inputting a command to obtain the newer version of the modules;

wherein the second obtaining means obtains the newer

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version of the modules when the command to obtain the newer version thereof is inputted.

3. The information processing apparatus as set forth in claim 1,

wherein the update softwares are modules that are currently not being installed and to be added in the information processing apparatus of the plurality of users and that are made to correspond to the storing regions storing the update softwares; and

wherein the judging means has:

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means for comparing the list of modules obtained from the storing regions storing the update softwares and the modules that are currently being installed in the information processing apparatus, and forming a list of modules that are currently not being installed in the information processing apparatus, and

means for presenting the formed list to the users and inputting a command to obtain the modules currently not being installed,

wherein the second obtaining means obtains the modules currently not being installed in the information processing apparatus when the command to obtain the modules currently not being installed is inputted.

4. The information processing apparatus as set forth in claim 2, further comprising:

means for accessing to the storing regions storing update softwares and obtains a list of modules again by

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accessing to the storing regions storing the update softwares according to the obtained location information when the command to obtain the modules is inputted; and

means for re-forming the list of the newer version of modules according to the list obtained again;

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wherein the second obtaining means obtains the newer version of the modules according to the re-formed list of modules.

5. The information processing apparatus as set forth in claim 3, further comprising:

means for accessing to the storing regions storing update softwares and obtains a list of modules again by accessing to the storing regions storing the update softwares according to the obtained location information when the command to obtain the modules is inputted; and

means for re-forming the list of the modules currently not being installed in the information processing apparatus according to the obtained list;

wherein the second obtaining means obtains the list of modules currently not being installed according to the re-formed list of modules.

6. The information processing apparatus as set forth in claim 1, further comprising:

means for previously storing a name of the software that is being excluded from the judgment of judging whether there are any update softwares to be obtained; and

means for restricting updating softwares according to

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the stored names of the software.

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7. The information processing apparatus as set forth in claim 1,

wherein the information processing apparatus is capable of communicating with a link machine as a master machine through the network; and

wherein the information processing apparatus has means for having the link machine compare the list of modules of the update softwares obtained from the storing regions and the modules that is currently being installed in the information processing apparatus and judge whether there are any update softwares to be obtained, and when there are some update softwares judged to be obtained, access to storing region for each of the software judged to be obtained according to each of the obtained location informations and obtain the necessary update softwares from the storing regions storing the update softwares.

8. A system that a center computer and an information processing apparatus of a user is capable of communicating through a network:

wherein the center computer has:

means for previously putting away update softwares for a plurality of softwares provided to a plurality of users by a plurality of software vendors in a plurality of storing regions storing a plurality of update softwares that are provided on the network so that each of the storing regions corresponds to each of a plurality of location informations

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indicating a location of each of the plurality of storing regions for each of the update softwares and a plurality of user identification informations of each of the plurality of users,

receiving means for receiving the user identification information from the information processing apparatus, and

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referencing means for having the information processing apparatus refer to the location information of the storing regions for update softwares that corresponds to the user identification information when the user identification information is received by the referencing means;

wherein the information processing apparatus of the user has:

sending means for sending the user identification information to the center computer,

first obtaining means for obtaining a plurality of location informations indicating locations of a plurality of storing regions that corresponds to the user identification information sent by the sending means,

second obtaining means for obtaining a plurality of lists of the plurality of update softwares by accessing to the plurality of storing regions storing the plurality of update softwares according to the plurality of location informations obtained by the first obtaining means,

judging means for judging whether there is any update softwares to be obtained by comparing the obtained list and

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the softwares currently being installed in the information processing apparatus, and

third obtaining means, when the judging means judges that there are some update softwares to be obtained, for obtaining the update softwares by accessing to each of the storing regions storing the update softwares for each of the software judged to be updated according to each of the obtained location informations.

9. The system as set forth in claim 8,

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wherein the plurality of storing regions storing the update softwares are provided for each of the plurality of software vendors,

wherein the means for putting the plurality of update softwares to the plurality of storing regions for update softwares by each of a plurality of different softwares provided by each of the plurality of software vendors so that each of the plurality of software updates corresponds each of the plurality of location informations for each of the update softwares and each of the plurality of user identification informations;

wherein the first obtaining means obtains each of the location informations for each of the software storing regions storing update softwares corresponding to the user identification information, and

wherein the second obtaining means and the third obtaining means access to each of the plurality of storing regions storing update softwares according to each of the

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plurality of location informations.

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The system as set forth in claim 8,

wherein the means for previously putting the plurality of update softwares in the plurality of storing regions storing update softwares so that each of a combination or a plurality of combinations out of the different softwares provided by the plurality of software vendors corresponds to the plurality of location informations of each of the plurality of storing regions for each of the update softwares and the user identification information of each of the plurality of users.

11. (Amended) A method of updating a software installed in an information processing apparatus capable of communicating with a center computer through a network, comprising:

sending an user identification information for identifying an user using the information processing apparatus to the center computer;

obtaining from the center computer a plurality of location informations indicating locations of a plurality of storing regions that correspond to the user identification information sent by the sending means, out of a plurality of location informations of the plurality of storing regions that are made to correspond to the user identification information of each of a plurality of users: the plurality of storing regions are provided on the network for storing update softwares for a plurality of softwares

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provided by a plurality of software vendors to the plurality of users:

accessing to the plurality of storing regions for update softwares according to the received plurality of location informations and obtaining a plurality of lists of software to be updated from the plurality of storing regions storing update softwares;

judging whether there are any update softwares to be obtained by comparing the list of the update softwares and the softwares currently being installed in the information processing apparatus; and

obtaining necessary update softwares from the storing regions storing update softwares for each of the software judged to be obtained by accessing to each of the storing regions storing update softwares according to the location information when there is an update software judged to be obtained.

12. (Amended) A program for causing an information processing apparatus capable of communicating with a center computer through a network to execute a processing, the processing comprising:

a sending step for sending an user identification information for identifying an user using the information processing apparatus to the center computer;

an obtaining step for obtaining from the center computer a plurality of location informations indicating locations of a plurality of storing regions that correspond to the user identification information sent by the sending means, out of a plurality of location informations of the plurality of storing regions that are made to correspond to the user identification information of each of a plurality of users: the plurality of storing regions are provided on the network for storing update softwares for a plurality of softwares provided by a plurality of software vendors to the plurality of users;

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an accessing step for accessing to the plurality of storing regions for update softwares according to the received plurality of location informations and obtaining a plurality of lists of software to be updated from the plurality of storing regions storing update softwares;

a judging step for judging whether there are any update softwares to be obtained by comparing the list of the update softwares and the softwares currently being installed in the information processing apparatus; and

an obtaining step for obtaining necessary update softwares from the storing regions storing update softwares for each of the software judged to be obtained by accessing to each of the storing regions storing update softwares according to the location information when there is an update software judged to be obtained.